

INTERNATIONAL SEARCH REPORT

International Application No.

FCT/EP 03/01548

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H02J7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 477 124 A (TAMAI) 19 December 1995 (1995-12-19)	1,3,4, 6-8,10, 11
Y	column 2, line 20 -column 4, line 7; figures 1,2	2,5,9
Y	US 5 731 686 A (MALHI) 24 March 1998 (1998-03-24) column 3, line 17 -column 7, line 12; figures 1-7	2,5,9
X	US 6 118 253 A (MUKAINAKANO ET AL) 12 September 2000 (2000-09-12) column 1, line 1 -column 5, line 2; figures 1-7	1,3,4,6, 8,10,11



Further documents are listed in the continuation of box C.



Patent family members are listed in annex

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

30 June 2003

Date of mailing of the international search report

11/07/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 789 902 A (ABE ET AL) 4 August 1998 (1998-08-04) column 1, line 1 -column 9, line 43; figures 1-7 ---	1, 4, 6-8, 11
X	US 6 346 795 B2 (HARAGUCHI ET AL) 12 February 2002 (2002-02-12) column 1, line 1 -column 10, line 17; figures 1-10 ---	1, 4, 6-8, 11
X	DE 195 33 537 A (FRAKO KONDENSATOREN) 13 March 1997 (1997-03-13) column 1, line 1 -column 2, line 65; figure 1 -----	1, 6, 8, 11

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Information on patent family members

International Application No

PCT/EP 03/01548

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			DE 4429101 A1	23-02-1995
US 5731686	A	24-03-1998	EP 0644642 A2	22-03-1995
US 6118253	A	12-09-2000	JP 3305257 B2	22-07-2002
			JP 11318034 A	16-11-1999
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